

Secondary Academic 7-12 Endorsement in Mathematics

Comprehensive Major

Thirty-six (36) semester credits required for a major in mathematics **must** include:

1. Nine (9) semester credits in calculus; **AND**
2. Twenty-seven (27) semester credits to include coursework in **each** of the following:
 - I. Probability or statistics
 - II. Number theory or numerical analysis
 - III. Linear algebra
 - IV. Abstract or modern algebra
 - V. Finite mathematics or discrete processes; **AND**
3. If additional credits are required to fulfill the twenty-seven (27) credit requirement identified above, you may choose from any of the following areas:
 - I. History of mathematics
 - II. Euclidean geometry
 - III. Non-euclidean geometry
 - IV. Mathematical computer applications, data structures or programming
 - V. Differential equations; **OR**
 - VI. Real number analysis

Comprehensive Minor

Twenty- four (24) semester credits required for a minor in mathematics **must** include:

1. Six (6) semester credits in calculus courses; **AND**
2. Eighteen (18) semester credits in the following:
 - I. Probability or statistics
 - II. Finite mathematics, discrete mathematics, number theory or numerical analysis
 - III. Linear, abstract or modern algebra; **AND**
3. If additional credits are required to fulfill the eighteen (18) credit requirement identified above, you may choose from any of the following areas:
 - I. Multivariate calculus
 - II. History of mathematics
 - III. Differential equations
 - IV. Real number analysis
 - V. Euclidean geometry
 - VI. Non-euclidean geometry
 - VII. Mathematical computer applications, data structures or programming